VOLUME 11 1990

SUBJECT INDEX

Abstinence, 693
Abstinence syndrome, 277, 969
N-Acetyl derivatives, 29
N-Acetylation, 797
Acetylsalicylic acid (ASA), 293
ACTH, 59, 149, 177, 951, 1183, 1305
ACTH(1–24), 915
ACTH (fragment), 29
ACTH/MSH(4–10), 915
Activity, 1277
Acute edema, 979
Acylation, 1041
Adamantane-acetic acid, 1041
Adenohypophysis, 79
Adenylate cyclase, 1009, 1151
Adipokinetic hormone, 1037
Adrenal gland, 973
Adrenal medulla, 149, 973
β-Adrenergic, 533
Adrenergic antagonists, 963
Adrenoceptors, 661
Adrenocortical cell, 29
Adrenocorticotropic hormone (ACTH), 477
Adrenocorticotropin, 729
Afferents, 805, 921
Affinity ligands, 311
Aggression, 1277
Aging, 1277
Agonist, 485
Agonist activity, 873
Airways, 1211
AKH/RPCH family, 455
Alcohol, 1277
Aldosterone, 29, 577, 763, 767
Aldosterone secretion inhibitory factor, 973
Algometer, 1127
Alpha-melanocyte stimulating hormone, 979
Amidated joining peptide, 149
Amino acid sequence, 79, 123, 683, 703
cAMP, 661, 945
Amphibian peptide, 591
Amphibians, 199
Amygdala, 995
Analeptic, 1021
Analgesia, 983
ANF, 185
ANF disappearance, 501
Angiotensin I, 117
Angiotensin II, 117, 375, 1049
[Sar^1]Angiotensin II, 359
[Sar^{1}Ala^8]Angiotensin II, 1049
[Sar^1-Leu^8]Angiotensin II, 557
Angiotensin II-induced drinking, 339
Angiotensin II receptor, 243
Annelida, 75
Antagonist, 485, 945, 1163
Anterior pituitary, 667, 1009, 1065
Anti-inflammatory agents, 979
Antinociception, 139
Antisense peptide, 857
Anti-substance P serum, 1065
Aortic depressor nerve, 305
Aortic valve insufficiency, 843
Arachnoid cell, 1245
Arcuate nucleus, 595, 1045
Area postrema, 837
Arginine vasopressin, 51, 59
Arousal, 1021
Artery, 381
Atrial natriuretic factor, 387, 973, 1003, 1175
Atrial natriuretic peptide, 33, 193, 577, 753, 837, 843
Autonomic, 955
Autoradiography, 243, 655, 779, 827, 1055, 1199, 1255
Avian, 641
Avoidance, 911
AVP, 345
AVP analogs, 633
AVP(4–8) ester, 633
Axon reflex, 1133

B-50/GAP-43, 951
B_1 and B_2 receptors, 39
Baroreceptor reflexes, 305
Basic peptides, 1003
BBS, 595
Behavior, 473, 897, 983, 995, 1313
Bestatin, 277
Beta-casomorphin(1–7), 1
Beta-endorphin, 1113
Binding, 1151
Binding sites, 193
Binding specificity, 1225
Bioactivity, 299
Bioassay, 185
Biopsy, 129
Biotin, 687, 1151
Biotinylated analog, 687
Blood flow rate, 451
Blood pressure, 305, 805, 921, 939, 955, 1151
Blood pressure regulation, 557
Blood-brain barrier, 467, 595
Body temperature, 1027
Bolton-Hunter, 655
Bombesin, 173, 221, 255, 265, 299, 393, 879, 1143
Bombesin receptor, 1143
Bombesin receptor antagonist, 255
Bone marrow, 625
Bradykinin, 39, 753, 1041, 1127, 1133
[des-Arg^9]Bradykinin, 39
Bradykinin inhibitor, 1041
Brain, 5, 271, 281, 1175, 1217
Brain cathepsins, 679
Brain natriuretic peptide, 973
Brattleboro rat, 345, 557
Bronchial carcinoids, 149

C-amide derivatives, 29
Ca^{++}, 393
Caerulein, 1263
Caffeine, 927
Calcitonin, 485
Calcitonin gene-related peptide, 491, 583, 625, 753, 885, 1191, 1233
Calcium, 1163
Calmodulin, 951
Canine xenopsin, 747
Capsaicin, 491, 921, 1211
Cardiac, 533, 753, 955
Cardiac membrane, 545
Cardiodilatin, 185
Cardiovascular, 921
Cardiovascular reflexes, 805
Cardiovascular responses, 1277
Cat, 45
Cat small intestine, 417
Catecholamines, 435
CCK, 1033, 1199
CCK antagonists, 1033
Cell culture from green monkey kidney, 1049
Cell density, 1049
Cell size analysis, 491
Cellular dehydration-induced drinking, 339
Central nervous system, 1217
Cerebral cortex, 129, 1109
Cerebrospinal fluid, 181, 969
CGRP, 863, 1211
CGRP receptor antagonists, 885
Chemical assay, 683
Chemical cross-linking, 1143
Chemiluminescence, 393
Chemokinesis, 1305
Chicken brain, 443
Chicks, 647, 915
Chinchilla, 683
Cholecystokinin, 213, 221, 237, 255, 265
Cholecystokinin analogues, 873
Cholinergic, 1021
Choroid, 655
Chromaffin cell, 435, 973
Chromatography, 65
Chromogranin, 79
Chromogranin A, 435
Chronotropism, 753
Circulation, 955
Circumventricular organs, 243, 557, 595
Colocalization, 103
Colon, 641
Compound 48/80, 1003
Conditioned response, 1027
Conformational properties, 359
Contact sensitivity, 979
Contractility, 497
Converting enzyme, 375
Corpus cardiacum, 455
Cortical organization, 1055
Corticosteroids, 539
Corticosterone, 29, 59
Corticotropin, 951
Corticotropin-releasing hormone, 729
Corticotropin-releasing factor, 1183
Cortisol, 473
CRF-41, 51, 59
Cross-linking, 1239, 1255
Cross-tolerance, 139
CSF, 5
CXBK mice, 281
Cyclic AMP, 1163, 1183, 1205
Cyclic GMP, 577
Cyclo(His-Pro), 145

Cystatin domains, 679
Cysteine proteinase inhibitors, 679
Cytosolic calcium, 1033

D-Trp substitution, 1139
D_1-DA receptor, 145
D_2-DA receptor, 145
DA transporter complex, 145
DA uptake, 145
DAGO, 305
DBA/2 and C57BL/6 mice, 591
DBH, 863
DDAVP, 473, 1313
Deficiency, 345
Degradation, 1225
Deltorphin, 591
Denervation, 863
Deoxyglucose, 557
[^{14}C]Deoxyglucose, 837
Dependence, 1277
Depression, 1277
[D-Arg^2]-Dermorphin tetrapeptide analogs, 139
Desensitization, 817
Development, 177, 667, 927, 1055
Dexamethasone, 51, 59
Dietary self-selection, 221
Differential distribution, 443
Digitonin, 1255
Dimethylsulfoxide, 359, 367
Dispersed cells, 763
Dissociated brain cells, 1109
Dogfish, 1175
Dopamine, 1169
Dopaminergic system, 1309
Dorsomedial nucleus, 995
Double-label, 621
Drinking, 697, 837, 1277
Drinking inhibition, 339
Dulcerozine, 293
Dynorphin, 381, 719, 1233

Eating, 995, 1277
EEG, 527
Eel brain, 507
Electromotor neurones, 69
Electron microscopy, 767
Enalaprilat, 375
Endocrine cells, 149
Endocrine pancreas, 1081
Endopeptidase-24.11, 287, 1245
Endopeptidase-24.11 inhibition, 387
β-Endorphin, 149, 797
β-Endorphin(1–13), 311
Endothelin-1, 763, 767
Enkephalin analogs, 679
Enkephalin, extended forms, 1119
Enkephalin, release, 1119
[D-Ala^2-Met^5]Enkephalinamide, 697
Enkephalinase, 1245
Enkephalin-cystatin peptides, 679
Enkephalins, 435, 983
Enkephalins (costorage with norepinephrine), 565
Enteric nervous system, 95, 497, 779
Enzymatic digestion, 227
Enzyme resistance increase, 405
Epilepsy, 1277
Estrogen, 903
Estrous cycle, 903
Ethanol, 697
Ethanol lesions, 293
Ether stress, 59
Evolution, 461, 507, 521
Exocrine pancreas, 1009
Expression in *E. coli*, 1069
Extravasation, 1003
Eye, 655
Eye chamber, 1087

F-8-F-NH_2, 345
FAB tandem mass spectrometry, 1037
Fast protein liquid chromatography, 111
Fear, 915
Feeding, 265, 595, 673
Fever, 1027
Fibroblastic, 1245
Field stimulation, 903
Fimbria fornix, 911
Flare, 1133
Flounder urophysis, 891
FMRFamide, 75
FMRFamide family, 849
FMRF-NH_2, 277, 969
FMRF-NH_2-like peptide, 345
Food intake, 873
Forskolin, 381
Frontal cortex, 661

GABA, 103, 1065
Galanin, 333, 497, 863, 989, 995, 1191, 1217
Galanin binding sites, 333
Galanin fragments, 333
Gastric acid secretion, 111, 789
Gastric and duodenal ulcers, 293
Gastric emptying, 1199
Gastric luminal serotonin, 789
Gastric motor function, 789
Gastric secretion, 707
Gastrin, 259, 707
Gastrin cells, 259
Gastrin-releasing peptide, 259, 265, 737
Gastrin-releasing peptide (18–27), 173
Gastrin-releasing polypeptide (GRP), 95
Gastrointestinal hormones, 111
Gastrointestinal motility, 515
Gastrointestinal tract, 779
Gel filtration, 199
Gender, 1313
Gestation, 177
Glucagon, 461, 683
Glucagon release, 173
Glucose metabolism, 557
Glyceryl trinitrate, 381
Glycogen phosphorylase activating hormone, 1037
Glycogen phosphorylase activation, 1037
GnRH, 443, 507, 521
GnRH molecular forms, 443, 507, 521
GnRH RIA, 443, 507, 521
Growth hormone release, 707
GRP, 69, 393
Guanine nucleotide, 545, 609
Guinea pig, 13, 65, 613
Gut, 149, 427
Gut peptides, 213

Habenular-interpeduncular pathway, 243
HACU, 1021
Hawkmoth, 849
hCGRP(8–37), 885
hCGRP(12–37), 885
hCGRP analogs, 885
hCGRP peptide fragments, 885
Heart rate, 805, 921, 939, 1151
Helodermin-like peptides, 1239
Helodermin receptor, 1239
High affinity receptors, 773
High performance liquid chromatography, 95, 111, 185
High salt intake, 501
Hippocampal, 1021
Hippocampus, 103, 287
Histamine, 903, 1003
Hormone receptors, 477
HPLC, 205, 271, 443, 507, 521, 817, 849, 1217
Human, 129, 271, 1127, 1133
Human βCGRP, 903
Human GIP, 1069
Human glioma cells, 1225
Human meningiomas, 1245
Human neuroblastoma cells, 773
Hydra head activator neuropeptide, 271
Hydrocortisone, 237
Hydrogen gas clearance, 789
5-Hydroxytryptamine, 1127, 1133
Hypertrehalosemia, 455
Hypophysectomy, 539
Hypothalamic fragments, 1065
Hypothalamic lesions, 539
Hypothalamus, 995
Hypothermia, 963

ICI174864, 1045
Idazoxan, 963
IL-1 secretion stimulation, 405
Image analysis, 557
Immune system, 1305
Immunoaffinity chromatography, 185
Immunocytochemistry, 45, 103, 199, 397, 621, 863, 1055, 1175, 1233
Immunohistochemistry, 13, 33, 129, 583, 707, 1087
Immunology, 1277
Immunomodulating peptides, 1305
Immunoneutralization, 707
In vitro, 1003
In vitro study, 869
In vivo, 1003
Indomethacin, 293
Ingestive behavior, 1199
Inhibitory avoidance learning, 163
Innervation, 13, 1269
Inositol phosphates, 661
Inotropism, 753
Insects, 427
Insulin, 461
Insulin binding, 467
Insulin family of peptides, 169
Insulin receptors, 5, 467
Insulin release, 173
Integrative peptide, 595
Intermediate pituitary, 797
Internalization, 1225
Intestinal mucosa, 779
Intestinal transit, 1113
Intestine, 613
Ion exchange, 849
Ion exchange chromatography, 205
Ion transport, 497
Ischemia, acute CNS (neuropeptide/norepinephrine contents and activation of processing), 565
Isocaloric diets, 221

Isolated duodenojejunum, 255
Isolation, 65, 299, 613, 747
Isopeptide bond, 405
Isoproterenol, 903
IV administration, 983

Jejunum, 497

Kappa opioid receptors, 311
Kassinin-like peptides, 299

Lacrimal gland, 477
Lactation, 667
Lateral hypothalamus, 595
Learning, 527, 927, 1277
Leptomeninx, 1245
Leu-enkephalin, 697
Lever press, 265
Limulus, 205
Lipid mobilization, 1037
Litorin-like peptides, 299
Liver, 857, 1009
Liver plasma membrane, 1255
Locomotor activity, 551
Locus coeruleus, 21
Locusta migratoria, 427
Longitudinal muscle, 497
LPL, 879
LPS, 1027
Luminal release, 1211
Lung, 1009
Lymph nodes, 13
Lymphocytes, 1009

Macrolides, 515
Macronutrients, 221
MAP-2, 1055
Marsupial brain, 521
Mast cells, 1003
Maturation, 177
Mazindol-binging sites, 145
MCH analogues, 1103
MCH fragments, 1103
Mechanisms of pancreatic TRH secretion, 1081
Melanin-concentrating hormone (MCH), 1103
Melanocytes, 351
Melanocyte-stimulating hormones (MSH), 477
Melanophore bioassay, 1103
α-Melanotropin, 351
Melanotropins, 477
Melatonin, 1075
Memory, 473, 595, 927, 933, 1263, 1277, 1313
Meningotheliomatous, 1245
Mental illness, 1277
Message sequences, 351
Met-enkephalin effects, 417
Met-enkephalin-like immunoreactivity, 417
Metabolic clearance rate, 501
Metabolism, 177, 1093
Methysergide, 1003
Mice, 265, 933
Microsequence analysis, 111
Microwave irradiation, 1191
MIF-1, 527
Minute ventilation volume, 939
Miosis, 1309
Modulation, 281
Molecular characterization, 1239
Molecular heterogeneity, 111, 213
Monoamines, 873
Monoclonal antibody, 577, 707
Monocytes, 1305
Morphine, 139, 277, 647, 693, 969, 1113
Morphometry, 767
Motilin, 515
Motility, 111, 641
Motivation, 265
Mouse, 227
Mouse pancreatic acini, 1143
Mouse strains, 281
Movement sensitive mattress, 1
mRNA, 33, 621, 843
MSH, 177
α-MSH, 351, 647, 797, 1027, 1183
α-MSH inhibitors, 351
Mu receptors, 305
Mucosal immune system, 879
Multiple forms of GnRH, 507, 521
Multiple sclerosis, 181
Muscle, 177
Muscle contractions, 427
Musculus temporalis, 1127
Myenteric ganglia, 779
Myenteric neurones, 69
Myotropin, 427

N- and C-terminal domains, 367
Naloxone, 1, 305, 647, 969
Natriuresis, 577
α-Neoendorphin, 65, 311
Neonatal, 1, 1093
Neonatal rat, 1199
Neonate, 89
Nereis virens, 75
Nerves, 1087
Neural lobe, 837
Neuroanatomy, 1055
Neuroblastoma NG108-15, 375
Neurointermediate lobe, 51
Neurointermediate lobe cells, 729
Neurokinin A, 293, 339, 907
Neurokinin A analogs, 619
Neurokinin B, 827
Neurologic disease, 181
Neuromedin B, 393
Neuromedin N, 227, 713
Neuromedin U, 613
Neuron, 753
Neuron culture, 103
Neuronal birthdate, 1055
Neuropathic pain, 719
Neuropeptide, 13, 95, 259, 277, 427, 455, 473, 613, 737, 879, 927, 933, 955, 969, 973, 979, 1055, 1103, 1175, 1211, 1305, 1313
Neuropeptide degradation, 287
Neuropeptide Y, 45, 111, 129, 381, 451, 545, 661, 673, 963, 1087, 1151, 1191
Neuropeptide Y (costorage with norepinephrine), 565
Neurotensin, 227, 551, 641, 713, 805, 921, 1169, 1191, 1309
[D-Trp]Neurotensin, 551
Neurotensin analogues, 1169
Neurotensin receptors, 1245
Neutral endopeptidase, 1119
Neutrophil elastase release, 869
NK-2 receptors, 293
NK-2 selective antagonists, 619
NMDA receptor antagonist, 1263
NMR studies, 359, 367
Nociception, 719, 1127, 1133, 1233
Nodose ganglia, 989
Non-small cell lung cancer, 1205
Noradrenaline, 451
Noradrenaline neurons, 21
Norepinephrine, 995
Normal/transplanted pancreas, 1087
NPY, 345, 863
Nuclear Overhauser effect (NOE) enhancement spectroscopy, 367
Nuclear Overhauser effect spectroscopy in the rotating frame (ROESY), 359
Nucleus of the solitary tract, 595
Nucleus tractus solitarius, 305

Obesity, 467
6-OHDA lesions, 21
One-trial inhibitory avoidance, 591
Ontogeny, 339, 527, 897, 1199
Opiate antagonists, 969
Opiate dependence, 277, 969
Opiates, 277, 969, 1045, 1277
Opioid peptides, 65, 719
Opioid receptor binding, 281
δ-Opioid specific ligand, 983
Opioids, 305
Opossum kidney, 945
Orchiectomy, 1157
Org2766, 911
Osmotic stimulation, 51, 59
Osteoprogenitor cell, 625
Ovary, 451
Oviduct, 427
Oxytocin, 51, 533, 539, 753, 927, 1075

PACAP, 773
Pain, 1045, 1127, 1133
Pancreas, 461
Pancreatic acini, 485, 1163
Pancreatic amylase, 237
Pancreatic juice, 237
Pancreatic polypeptide, 673, 683
Pancreatic secretion, 111
Papain, 679
Paper folding test, 1313
Paracrine actions, 707
Parathyroid hormone (PTH), 945, 1139
Parathyroid hormone related protein, 945
Paraventricular nucleus, 595, 621, 995
Partial agonist, 485
Partial agonist activity, 1139
Passive avoidance, 633, 927
Passive avoidance response, 1263
Pentobarbital, 1045
Peptidase inhibitors, 817
Peptidase-resistant enkephalins, 983
Peptide, 177, 293, 737, 1093, 1277
Peptide antagonists, 885
Peptide degradation, 213
Peptide histidine isoleucine (PHI), 1015
Peptide processing, 129, 375
Peptide purification, 849
Peptide synthesis, 169
Peptide YY (PYY), 111
Perifusion, 1075
Perinatal period, 1081
Peripheral neuropathy, 719
Peritoneum, 805
Phagocytic cells, 393
Pheochromocytoma, 907
PHI, 123, 1009

PHI-GLY and PHV(1–42) receptors, 1009
PHM, 401
Phorbol ester, 973, 1183
Phosphate uptake, 945
Pig, 497, 989
Pig intestine, 713
Pineal gland, 1075
Pituitary, 79, 345, 1157, 1175
Pituitary gland, 609
Plaque assay, 729
Polyacrylamide gel electrophoresis, 1255
Polyethylene glycol precipitation, 1255
POMC, 149
POMC cells, 1183
POMC mRNA, 1183
Porcine follicular fluid, 117
Postprandial intestinal motility, 1169
Postsecretory processing, 435
Posttranslation processing, 89
Posttranslational processing, 213
Potency, 1041
Prazosin, 963
Precursor processing, 227
Precursor segments, 747
Preference, 697
Prenatal, 177, 927
Preprotachykinin, 907
Pressure-pain threshold, 1127
Primary sensory neurons, 491
Primate brain, 243
Pro-atrial hormone, 185
Proatrial natriuretic factor, 199
Proctolin, 205
Pro-dynorphin, 89
Pro-enkephalin, 89
Prohormone, 193
Prolactin, 59, 609, 939, 1065
Prolyl endopeptidase, 375
Prolyl-leucyl-glycinamide (PLG), 527
Pro-τ-MSH, 149
Propranolol, 963
Prosomal CNS, 205
Protein A fusion protein, 1069
Protein kinase C, 1183
Proteolysis, 951
Prothoracicotropic hormone, 169
Pseudophryne güntheri skin, 299
PTH-related peptide (PTHrP), 1139
Pulsed-liquid phase sequencing, 455
Purification, 683
Pylorus, 1199
Pyrilamine, 1003

Quantitative autoradiography, 557
Quasi-abstinence syndrome, 277

Rabbits, 123
Radioautography, 21
Radioimmunoassay, 111, 199, 271, 1217
Radioligand binding, 827
Radioreceptor assay, 545
Raphe nuclei, 397
Rat, 1, 103, 163, 177, 213, 237, 255, 339, 539, 551, 693, 697, 763, 767, 843, 897, 951, 1003, 1045, 1087, 1233
Rat brain, 397, 827
Rat αCGRP, 903
Rat jejunal smooth muscle membranes, 333
Rat stomach smooth muscle membranes, 333
Rat thymus, 33, 1269
Receptor, 545, 655, 667, 713, 737, 1015, 1033, 1157, 1199, 1255
Receptor affinity, 1139
Receptor antagonists, 173
Receptor autoradiography, 259, 311, 1245
Receptor binding, 311, 939
Receptor visualization, 1151
Reflexes, 527, 955
Region-specific radioimmunoassay, 227
Regulatory peptides, 149
Release, 443
Renin, 577
Reserpine (neuropeptide processing and synthesis), 565
Respiration, 1277
Respiratory tract, 13
Retention, 933
Retina, 655
Retrieval, 911
Reverse phase HPLC, 227
RIA, 117
ROS 17/2.8 cells, 1139
RX77368, 897

Salivary glands, 863
Sarmesin, 367
Satiety, 221, 595
SCLC, 1033
SCLC cell lines, 1239
Scyliorhinin II, 827
Scyliorhinus canicula, 1175
Secretin, 123
Semiselective formation of disulfide bridges, 169
Separation distress, 647, 915
Sequence, 613, 747
Sequence analysis, 65
Serotonin, 1003
Sex, 1277
Sheep VIP, 703
Size exclusion chromatography, 205
Skin, 1133
Sleep-wake behavior, 1
Small cell lung carcinoma, 1239
Small intestine, 65, 641, 1093
Smooth muscle, 713, 939
Smooth muscle activity, 417
Smooth muscle contractility, 117
SMS 201-995, 869
Social effects, 647
Solid phase peptide synthesis, 185
Solid phase synthesis, 673
Solubilization, 737, 1255
Somatostatin, 103, 181, 287, 381, 461, 707, 863, 879
Somatostatin binding sites, 21
Somatostatin receptor, 1109
SP, 1211
SP(1–7), 163
[pGlu^6]-SP(6–11), 163
Spatial orientation, 911
Spinal cord, 281, 693, 719, 817, 1119, 1217, 1233
Stem cell, 625
Stilbestrol, 903
Stomach, 259
Storage particles, 69
Stress, 1277
Stroop test, 1313
Structure-activity, 351
Struthio camelus, 79
Substance P, 13, 163, 173, 181, 281, 641, 655, 753, 817, 863, 879, 907, 1003, 1065, 1269
Substance P amino-terminal metabolites, 817
Substance P-like peptides, 299
Substantia nigra, 89, 595
Suckling deprivation-induced drinking, 339
Sucrose, 697
Sympathetic, 533, 805, 921
Synthetic PTHrP analogues, 1139

Tachykinin, 95, 163, 293, 299, 339, 619, 655, 1191
Tachykinin receptors, 827
Tail flick, 1045
Tandem mass spectrometry, 205
Taste, 595
Temperature, 1277
Tenebrio molitor, 455
Testosterone, 1157
Thalamus, 45
Thermoregulation, 963
Thiorphan, 387, 551, 1119
Thrombin cleavage, 1069
Thymocyte cell line 51E, 1009
Thymus, 539
Thyrotropin, 939
Thyrotropin-releasing hormone (TRH), 397, 939, 1113
Thyrotropin-releasing hormone receptors, 693
Tissue incubation, 443
Tissue uptake, 501
Tolerance, 1277
Tolerance-dependence, 693
TRH, 1081
^{3}H-[3-MeHis^2]TRH, 693
TRH analog, 897, 939
Tuftsin analogs, 405
Turtle, 461

U50,488, 311
U69,593, 311
Up-hill avoidance task, 163
Urophysin, 891
Urotensin I, 891
Uterine contraction, 583, 903
Uterine horns, 903
Uterine inhibition, 903
Uterus, 583

V-1 receptors, 1021
Vaginal blood flow, 401
Vagus nerve, 789
Vascular system, 885
Vasoactive intestinal peptide, 381, 753, 1015, 1157
Vasoactive intestinal peptide receptors, 1255
Vasoactive intestinal polypeptide, 95, 879, 1087
Vasoconstrictor activity, 673
Vasodilatation, 381
Vasodilation, 401
Vasopressin, 473, 687, 927, 1021, 1075, 1313
Vasopressin receptors, 857
Ventral bundle, 243
Ventricle, 843
VIP, 69, 123, 667, 703, 773, 863, 933, 1205, 1211, 1239, 1255
VIP receptors, 609, 1205, 1239
Visceral afferences, 989
Vocalizations, 647, 915
Volume expansion, 577
Volume of distribution, 501

Wheal, 1133
Withdrawal syndrome, 277

^{133}Xe, 451

Zenopsin, 713
Zona glomerulosa, 763, 767
Zophobas rugipes, 455
Zucker rats, 467

AUTHOR INDEX

Aalto, J., 1
Aanonsen, L. M., 779
Abbott, B. B., 647
Abou-Samra, A.-B., 1139
Adeghate, E., 1087
Adeyemi, E. O., 869
Afione, S., 1065
Agoston, D. V., 69
Agui, T., 609
Aguilera, G., 243
Aguirre, J. A., 45
Ahmad, S., 95
Aijon, J., 45
Aimone, L. D., 1217
Alexander, J. E., 205
Algeri, S., 911
Allescher, H.-D., 95
Al-Obeidi, F. A., 351
Alonso, J. R., 45
Altinkurt, O., 39
Argiolas, A., 539
Arilla, E., 1109
Arimura, A., 117, 773
Armour, J. A., 533, 753
Arnold-Reed, D. E., 891
Avery, D. D., 221, 595

Baamonde, A., 983
Babinski, K., 973
Baker, B. I., 1103
Balage, M., 5
Balasubramaniam, A., 545, 673, 1151
Baldini, M. G., 1305
Balment, R. J., 891
Barnett, W., 95
Barra, D., 299
Baskin, D. G., 467
Beaumont, A., 1245
Beckwith, B. E., 473, 927, 1313
Becquet, D., 1081
Behn, U., 111
Bellinger, D. L., 1269
Bennett, G. J., 719
Bepler, G., 1205
Berg, M. J., 679
Bernard, C., 255
Bernard, G., 255
Bernard, G. W., 625
Bernardi, M., 1305
Bertolini, A., 1305
Bhargava, H. N., 693
Bigam, G., 359
Bjartell, A., 149
Blinkenberg, M., 129
Bloom, S. R., 869
Bluet-Pajot, M. T., 21
Bond, E. F., 1113
Borrell, J., 697
Bossa, F., 299
Bosshard, A., 989
Brady, L. S., 311
Bredkjær, H. E., 401
Brochu, M., 387
Brodin, E., 95
Broer, Y., 5
Brosnihan, K. B., 375
Brown, D. R., 497, 641, 713, 779
Brown, D. W., 1103
Brown, J. C., 1069
Brown, S. L., 277, 969
Brun, A., 271
Buchan, A. M., 707
Buchanan, K. D., 227
Buchhalter, J., 103
Budzik, G. P., 1003
Bueno, L., 1169
Bulant, M., 397
Bull, D. F., 1027
Burbach, J. P. H., 1075
Burcher, E., 827
Burgoyne, R. D., 435
Buscail, L., 123, 773
Butler, C. K., 753
Buu, N. T., 501
Bykov, V., 311

Campbell, M. M., 1103
Cantin, M., 199, 1175
Carino, M. A., 1021
Carraway, R. E., 713, 747
Caruso, P., 1309
Casley, D. J., 857
Castellano, C., 591
Castrucci, A. M. L., 351
Catt, K. J., 243
Caulfield, M. P., 945
Cauvin, A., 123, 773, 1009
Cavaliere, S., 1309
Chaki, K., 139
Chance, W. T., 673
Chappell, M. C., 375
Chayvialle, J. A., 255, 989
Chiarotti, F., 527
Childs, G. V., 729
Chow, B. K.-C., 1069
Chrétien, M., 79
Christophe, J., 123, 773, 1009
Chu, L.-S., 683
Cirillo, D., 737
Cody, W. L., 351
Coen, C. W., 963
Coggins, P. J., 951
Cohen, L. A., 939
Cohen, Y., 873
Colas, B., 1109
Comoglio, P., 737
Conlon, J. M., 461, 891, 907
Cornett, L. E., 193
Costentin, J., 551
Coussaert, E., 1009
Coveñas, R., 45
Coy, D. H., 255, 333, 773
Cramer, H., 181
Cuber, J. C., 255, 989

d'Amore, A., 527
Danho, W., 679
Daniel, E. E., 95
Dauge, V., 983
Davidoff, M., 417
Davidsen, S. K., 1003
Davis, M., 111
Davis, T. P., 1093
Debeljuk, L., 1065
De Biase, D., 299
Debinski, W., 501
de Caro, G., 339
de Costa, B. R., 311
De Dios, I., 237
De Lean, A., 387, 973
De Loof, A., 427
De Neef, P., 123, 773, 1009
Depierreux, M., 1245
Depoortere, I., 515
Díaz, M. C., 1065
Dichter, M. A., 103
Dios, M., 45
Dockray, G. J., 435
Dohanics, J., 51, 59
Donáth, T., 1087
Donoso, M. V., 885
Dores, R. M., 89, 797
Dougherty, T. M., 277
Drago, F., 1309
Du, Y.-C., 633
Dubuc, I., 551
Dufour, S., 507
Duke, G. E., 641
Du Souich, P., 387, 501
Dutour, A., 1081
Duvilanski, B., 1065

Eberlein, G. A., 111
Eckart, K., 1037
Edvinsson, L., 1127, 1133
Ekman, R., 149, 271, 1211
Ekström, J., 863
Elitsur, Y., 879
Eng, J., 683
Entwistle, M. L., 477
Epelbaum, J., 21
Epstein, A. N., 339
Erspamer, V., 299
Ertan, A., 333
Evangelista, S., 293
Eysselein, V. E., 111

Fahrenkrug, J., 401, 1225
Fairweather, I., 227
Fargeas, M. J., 1169
Feldman, S. C., 1055
Félix, J. M., 1183
Fellion, E., 983
Felten, D. L., 1269
Felten, S. Y., 1269
Fenger, M., 149
Ferguson, D. G., 1151
Ferrario, C. M., 375
Feuerstein, G., 939
Feuilloley, M., 1175
Figlewicz, D. F., 467
Fioramonti, J., 1169
Fischer, J. A., 945
Fischer, J. E., 545, 673
Flood, J. F., 265, 933
Folly, G., 59
Fontaine, Y.-A., 507
Fournier, A., 885
Fowler, D. E., 277, 969
Freeman, S., 837
Furness, J. B., 613

Gacel, G. A., 983
Gäde, G., 455
Gafvelin, G., 703
Gammeltoft, S., 1225
Gardner, J. D., 485, 1143
Garland, J. S., 933
Gavras, H., 1041
Gavras, I., 1041
Ge, L. J., 117
Geiger, J., 181
Genedani, S., 1305
Georgiev, V., 1049
Gergely, J., 405
Gerhardt, P., 163
Gessa, G. L., 539
Giachetti, A., 293, 619
Gilles, J., 199
Giraud, A., 613
Giraud, A. S., 259
Giraud, P., 1081
Gispen, W. H., 911
Giuliani, S., 293, 619
Go, V. L. W., 1217
Goebell, H., 111
Gordon, F. J., 305
Gossen, D., 123, 773
Gourch, A., 873
Gourlet, P., 123, 773
Grandt, D., 111
Greenwood, M. R. C., 467
Griffin, P. R., 205, 849
Grizard, J., 5
Groome, J. R., 205
Gross, P. M., 557
Guaza, C., 697
Gulati, A., 693
Guo, Y.-S., 393
Gutkowska, J., 1175

Hadley, M. E., 351
Halaris, A. E., 661
Halton, D. W., 227

Hamilton, J., 213
Hammond, M. V., 277, 969
Han, J.-S., 1045
Handberg, G. M., 903
Hann, L. E., 477
Hänze, J., 33
Harris, M. R., 1055
Hasenöhrl, R. U., 163
Hayes, T. K., 427
Heitkemper, M. M., 1113
Heym, Ch., 13
Hicks, J. W., 461
Hilakivi, I., 1
Hilakivi, L. A., 1
Hildebrand, J. G., 849
Hildebrand, K. R., 497
Hiltz, M. E., 979
Hinds, L. A., 521
Hirth-Dietrich, C., 577
Ho, M., 1069
Hodgson, J. F., 869
Holleman, W. H., 1003
Holman, G. M., 427
Holst, M. R., 1003
Holzer, P., 789
Homberg, U., 849
Horita, A., 1021
Houston, C. W., 393
Hruby, V. J., 351
Huang, M., 1015, 1157
Huang, S. C., 1143, 1205
Huidobro-Toro, J. P., 885
Hunt, D. F., 205, 849
Huston, J. P., 163

Iadarola, M. J., 719
Ichiyama, A., 843
Igwe, O. J., 817
Ikegami, H., 145
Ishii, S., 287
Ishizaki, H., 169
Isogai, A., 169
Itoh, S., 1263
Ivanov, R., 1049

Jackson, H. C., 897
Jacobowitz, D. M., 243
Jacobson, A. E., 311
Jacquot, C., 873
Jansen, I., 1127, 1133
Jardine, I., 849
Järvinen, A., 939
Jennett, C. L., 797
Jensen, K., 1127, 1133
Jensen, R. T., 485, 1033, 1143, 1205
Jin, G.-F., 393
Johnston, C. F., 227
Johnston, C. I., 857
Jørgensen, J. C., 451
Jüppner, H., 1139

Kadekaro, M., 557, 837
Kahn, S. E., 467
Kaiser, L. M., 1255
Kajander, K. C., 719
Kammer, A. E., 849
Kashiba, H., 491
Kasprzak, A., 767
Kastin, A. J., 1277
Katz, I. A., 443
Kawai, K., 173
Kazda, S., 577
Kelly, J. M., 857
Kemp, B., 857
Keutmann, H. T., 1139
Kieselbach, G. F., 655
Kim, D. C., 281
King, D., 673
King, J. A., 443, 507, 521
King, M. G., 1027
Kingan, T. G., 849
Kinsman, R. G., 1103
Kisara, K., 139
Kisfaludy, L., 29
Kitabgi, P., 227, 551, 1245
Klassen, G. A., 533
Klein, R. L., 565
Kleinman, W. A., 683
Knaus, H. G., 655
Knutson, K. K., 1313
Koch, B., 1183
Koldovský, O., 1093
Kong, J. Y., 565
König, P., 655
Korc, M., 1093
Kordon, C., 21
Korman, L., 1205
Kostka, P., 95
Kovacs, K. J., 59
Krajniak, K. G., 75
Krebs, S. J., 927
Kreil, G., 591
Kris, R., 737
Krumins, S. A., 281
Kruse-Larsen, C., 129
Kuchel, O., 501
Kumar, R., 687
Kummer, W., 13
Kurkowski, R., 13
Kyrkouli, S. E., 995

Labroo, V. M., 939
Laemle, L. K., 1055
Lake, J. R., 277, 969
Lambadjieva, N., 1049
Lamberty, K. J., 927
Lammek, B., 1041
Lang, R. E., 33
Laplace, J. P., 989
Lara, J., 45
Larson, A. A., 281, 817
Larsson, I., 271
Lasaga, M., 1065
Law, J. H., 1037
Lazure, C., 79
Lebel, M., 805, 921
Leboulenger, F., 199
Lee, M., 1205
Lee, T. D., 111
Leecraft, B. M., 969
Legido, A., 103
Leibowitz, S. F., 995
Lekan, H., 837
Lemieux, M., 805, 921
Levivier, M., 1245
Leyva, J. E., 277
Liao, N., 397
Lin, C., 633
Linton, E. A., 51
Lipton, J. M., 979
Litthauer, D., 79
Liu, R.-Y., 633
Llorens-Cortes, C., 21
Loizzo, A., 527
Londowski, J. M., 687
Lopez, M. A., 237
Lorton, D., 1269
Lőw, M., 29
Lowry, P. J., 51
Lucas, D., 1119
Luis, J., 1239
Luk, G. D., 879
Luts, A., 863, 1211
Lutz, W. H., 687
Lutz-Bucher, B., 1183

McCoy, J. G., 221, 595
McDonald, T. J., 95
McGregor, G. P., 907
McHugh, P. R., 1199
McIntosh, C. H. S., 1069
McKay, D., 227
McNeill, D. L., 583

MacGillivray, R. T. A., 1069
MacLeod, S. L., 193
Maeda, Y., 1263
Maggi, C. A., 293, 619
Mailleux, P., 1245
Majane, E. A., 345
Makara, G. B., 51, 59
Makofske, R. C., 679
Malendowicz, L. K., 763, 767
Malin, D. H., 277, 969
Maltese, J. Y., 1081
Manin, M., 5
Männistö, P. T., 939
Manso, M. A., 237
Mantyh, P. W., 259
Mao, L.-M., 1045
Marks, N., 679
Marleau, S., 387
Martin, M., 237
Martinez, J., 873
Maruyama, K., 169
Massi, M., 339
Mathé, A. A., 1191
Maton, P. N., 485, 1163
Matsoukas, J. M., 359, 367
Matsumoto, K., 609
Mauri, A., 539
Mazzocchi, G., 763, 767
Mehl, A. E. I., 521
Melchiorri, P., 299, 591
Meli, A., 619
Melis, M. R., 539
Meneghelli, V., 767
Meyer, H. E., 111
Mező, G., 405
Michener, S. R., 1217
Micieli, G., 1309
Mikkelsen, J. D., 129
Millan, M. A., 243
Millar, R. P., 443, 507, 521
Minamino, N., 117
Mitra, S. P., 713, 747
Miyata, A., 117, 773
Mollison, K. W., 1003
Moody, T. W., 737, 1033, 1205
Moore, G. J., 359, 367
Moore, S., 1163
Mooser, V., 857
Moran, T. H., 1199
Morita, H., 843
Morley, J. E., 265, 933
Morris, J. L., 381
Morrow, G. W., 1069
Moss, C. A., 1103
Mounier, F., 21
Muff, R., 945
Mukai, H., 173
Munekata, E., 173
Murphy, R., 65, 613
Mussap, C. J., 827

Nachman, R. J., 427
Nagasawa, H., 169
Nakashima, M., 843
Nakata, N., 139
Naldini, L., 737
Nappi, G., 1309
Nash, A. A., 193
Nassar, J., 837
Naudé, R. J., 79
Nermo-Lindquist, E., 837
Netchitailo, P., 199
Neuser, D., 577
Nguyen, T. D., 1255
Nguyen, T. T., 973
Nicolas, P., 397
Nielsen, F. C., 1225
Nokihara, K., 185
Normansell, L., 915
Norris, J. S., 193
Nouel, D., 551
Nussdorfer, G. G., 763, 767

Oda, T., 843
Oelofsen, W., 79
Olesen, J., 1127, 1133
Oliver, C., 1081
Olson, G. A., 1277
Olson, R. D., 1277
Ong, H., 387, 973
Opgenorth, T. J., 1003
Orosco, M., 873
Osguthorpe, D. J., 1103
O'Sullivan, A. J., 435
Ottesen, B., 401
Ouafik, L'H., 1081
Ouichou, A., 1075
Öztürk, Y., 39

Paakkari, I., 939
Palazzesi, S., 527
Palle, C., 401
Panksepp, J., 647, 915
Papka, R. E., 583
Paquet, L., 79
Parker, L., 613
Parsons, A. M., 497, 713, 779
Patacchini, R., 293, 619
Paul, P. K. C., 1103
Pavone, F., 591
Pedersen-Bjergaard, U., 1127, 1133
Pederson, R. A., 1069
Peeters, T. L., 515
Pelletier, G., 199, 397
Pencheva, N., 417
Pennefather, J. N., 903
Perfumi, M., 339
Pesce, G., 1081
Pestellini, V., 619
Petros, T. V., 1313

Pévet, P., 1075
Pezzini, G., 527
Pfister, H. P., 1027
Philippe, C., 989
Phillips, J. M., 849
Phillips, P. A., 857
Piekut, D. T., 621
Pieretti, S., 527
Pisera, D., 1065
Pitsikas, N., 911
Plisetskaya, E. M., 673
Poland, R. E., 473
Pollack, P. F., 1093
Populin, R., 591
Porte, D., Jr., 467
Potts, J. T., Jr., 1139
Pradhan, T., 485, 1163
Prasad, C., 145
Prasco, P. E., 277
Pretel, S., 621
Price, D. A., 75
Prieto, J. C., 1109
Przedborski, S., 1245

Qu, L., 955

Radomirov, R., 417
Ragaut, R., 655
Rahmani, N. H., 693
Rampin, O., 989
Rao, K. R., 849
Rao, R. K., 1093
Rathe, J., 123
Rawson, R. E., 641
Raybould, H. E., 789
Rebuffat, P., 767
Reddy, S. N., 789
Reeve, J. R., Jr., 111
Reichlin, S., 103
Renard, M., 1081
Reno, C. R., 473
Reuner, C., 181
Reynoldson, N. A., 903
Rice, K. C., 311
Riehm, J. P., 849
Rigel, D. F., 545, 673, 1151
Rioux, F., 805, 921
Rissler, K., 181
Robberecht, P., 123, 773, 1009
Roberts, J. D., 299
Rodriguez, M., 873
Rogillio, R. B., 969
Roques, B. P., 983, 1245
Rorstad, O. P., 667, 1015, 1157
Rose, K. J., 177
Rosiński, G., 455
Rösler, N., 181
Rossowski, T. M., 333
Rossowski, W. J., 333
Rostene, W., 5
Rothman, R. B., 311
Rovero, P., 293, 619
Ruda, M. A., 1233
Ruiz de Elvira, M. C., 963

Sahara, Y., 719
Said, S. I., 1239
St-Pierre, S., 885
Sakurada, C., 287
Sakurada, S., 139
Sakurada, T., 139
Salers, P., 1081
Salford, L., 271
Sandi, C., 697
San Roman, J. I., 237
Sármay, G., 405
Saunders, N. R., 521
Savage, A. P., 869
Sawyer, T. K., 351
Schaefer, D., 111
Schaeffer, M., 111
Schipani, E., 1139
Schlessinger, J., 737
Schoofs, L., 427
Schulz, R., 33
Schwartz, G. J., 1199
Schwartz, M. W., 467
Scorza, T., 527
Segre, G. V., 1139
Sei, C. A., 89
Seilicovich, A., 1065
Seirafi, R. D., 995
Sejrsen, P., 451
Senba, E., 491
Senut, M. C., 21
Severini, C., 299
Seybold, V. S., 779
Shabanowitz, J., 205
Shaver, S. W., 557
Shaw, C., 69, 227
Sheriff, S., 545, 1151
Shew, R. L., 583
Shih, C., 625
Shiosaka, S., 1233
Shively, J. E., 111
Silver, A. J., 265
Simmaco, M., 299
Simonneaux, V., 1075
Sims, J. L., 969
Singer, G., 1027
Smith, E. R., 393
Soldani, G., 497
Soll, A. H., 259
Solomon, T. E., 213
Spampinato, D., 1309
Spruijt, B. M., 911
Staley, J., 1033
Stancampiano, R., 539
Stanley, B. G., 995
Staples, D. J., 351
Stasch, J.-P., 577
Stein, M., 673, 1151
Stenfors, C., 1191
Steveson, T. C., 797
Strand, F. L., 177
Stuesse, S. L., 955
Stump, B., 221
Sullivan, D. A., 477
Sun, X., 817
Sundler, F., 149, 863, 1211
Suzuki, A., 169
Suzuki, K., 139
Suzuki, S., 173
Swenson, R. R., 927
Szalay, K. Sz., 29
Szekerke, M., 405

Taché, Y., 707, 789
Taira, T., 1
Takahashi, O., 1233
Takashima, A., 1263
Tallant, E. A., 375
Tamura, S., 169
Tanaka, I., 843
Tassorelli, C., 1309
Tatro, J. B., 477
Teplow, D. B., 849
Terrell, M. L., 837
Theodorsson, E., 1191
Thureson-Klein, Å. K., 565
Till, R. E., 473
Tillinghast, E. K., 205
Tinius, T. P., 927
Tips, A., 427
Tobin, G., 863
Tohyama, M., 491
Townley, M. A., 205
Traub, R. J., 1233
Trinder, D., 857
Turkelson, C. M., 213
Turner, C. A., 65, 613
Tuxen, C., 1127, 1133

Ueda, Y., 491
Uematsu, T., 843
Uneno, S., 1139

Vallarino, M., 1175
Vanderhaeghen, J.-J., 1245
Vandermeers, A., 123, 1009
Vandermeers-Piret, M.-C., 123, 1009
Vandesande, F., 427
Vantrappen, G., 515
Vaudry, H., 199, 397, 1175
Venkova, K., 417
Verslijpe, M., 1245
Vesely, D. L., 193
Vetrovs, A., 205
Videau, C., 21
Vigna, S. R., 259
Vollmar, A. M., 33
Vonhof, S., 939

Waldeck, B., 1211
Walsh, J. H., 259, 707
Wang, Y.-X., 1041
Wank, S. A., 1143
Wanke, I. E., 667, 1157
Watanabe, H., 139
Watkinson, A., 435
Watson, W. H., III, 205
Westermark, B., 1225
White, P. D., 1103
Whittaker, V. P., 69
Widdowson, P. S., 661
Widimsky, J., 501
Widmark, E., 1211
Wiedermann, C. J., 655
Wong, H. C., 707
Wright, S., 1093

Yaksh, T. L., 1119, 1217
Yamaguchi, N., 387
Yamashita, K., 173
Yamazaki, T., 843
Yamdagni, R., 367
Yang, H., 707, 789
Yang, H.-Y. T., 345, 969
Yokosawa, H., 287
Yoshimi, T., 843
Yu, D.-H., 1143
Yuan, B., 753

Zacharia, S., 333
Zehres, B., 111
Zhou, N., 359
Zhou, Z.-C., 485
Ziegler, R., 1037
Zwiers, H., 951